

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method of inhibiting transport of anandamide in an individual or animal comprising administering to the individual or animal a therapeutically effective amount of a compound represented by the following structural formula:



and physiologically acceptable salts thereof, wherein:

X is a hydrophobic aliphatic hydrocarbon chain containing from about 4 to about 30 carbon atoms and having one or more nonconjugated cis double bonds in the middle portion of the chain;

Y is selected from the group consisting of amide and ester radicals; and

Z is selected from the group consisting of hydrogen, lower alkyl, hydroxy substituted lower alkyl, hydroxy substituted lower alkyl forming a ring with the Y group, amide radical, aryl, hydroxy substituted aryl, heterocyclic and hydroxy substituted heterocyclic radicals;

wherein if X contains from 18 to 21 carbon atoms, Z cannot be hydrogen if Y is an amide radical.

2. (original) The method of claim 1 wherein Z is a polar nonionizable group containing a hydroxy moiety at its distal end.

3. (original) The method of claim 1 wherein Y is an amide radical.

4. (original) The method of claim 1 wherein Y is an ester radical.

5. (original) The method of claim 1 wherein X has two or more nonconjugated double bonds.

6. (original) The method of claim 1 wherein X has at least four nonconjugated double bonds.

7. (original) The method of claim 1 wherein Z is a hydroxy substituted aryl group.

8. (previously amended) The method of claim 1 wherein Z includes an alkyl group alpha to the amido nitrogen.

9. (original) The method of claim 1 wherein Z is an (S) isomer of a chiral molecule.

10. (previously amended) A method of modifying the rate of anandamide inactivation in an individual or animal comprising administering to the individual or animal a therapeutically effective amount of an inhibitor that targets an individual's or animal's anandamide transporter, said transporter being a protein exhibiting a temperature-dependent, saturable, high affinity and Na^+ -independent mechanism, wherein the inhibitor excludes a compound represented by the following structural formula:



and physiologically acceptable salts thereof, wherein:

X is a hydrophobic aliphatic hydrocarbon chain containing from 18 to 21 carbon atoms and having one or more nonconjugated cis double bonds in the middle portion of the chain;

Y is an amide radical; and

Z is hydrogen.

11. (original) The method of claim 10 wherein the transporter-targeted inhibitor is an anandamide analog having a nonionizable head group containing a hydroxyl moiety at its distal end and a hydrophobic tail having a bent U-shaped stereochemical configuration.

12. (currently amended) A pharmacological formulation comprising a compound represented by the following structural formula:



and physiologically acceptable salts thereof, wherein:

X is a hydrophobic aliphatic hydrocarbon chain containing from about 4 to about 30 carbon atoms and having one or more nonconjugated cis double bonds in the middle portion of the chain;

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Y is selected from the group consisting of amide and ester radicals; and

Z is selected from the group consisting of hydrogen, lower alkyl, hydroxy substituted lower alkyl, hydroxy substituted lower alkyl forming a ring with the Y group, amide radical, aryl, hydroxy substituted aryl, heterocyclic and hydroxy substituted heterocyclic radicals;

wherein if X contains from 18 to 21 carbon atoms, Z cannot be hydrogen if Y is an amide radical.

13. (original) The formulation of claim 12 wherein Z is a polar nonionizable group containing a hydroxy moiety at its distal end.

14. (original) The formulation of claim 12 wherein Y is an amide radical.

15. (original) The formulation of claim 12 wherein Y is an ester radical.

16. (original) The formulation of claim 12 wherein X has two or more nonconjugated double bonds.

17. (original) The formulation of claim 12 wherein X has at least four nonconjugated double bonds.

18. (original) The formulation of claim 12 wherein Z is a hydroxy substituted phenyl aryl group.

19. (previously amended) The formulation of claim 12 wherein Z includes an alkyl group alpha to the amido nitrogen.

20. (original) The formulation of claim 12 wherein Z is an (S) isomer of a chiral molecule.

21. (previously added) The method of claim 1 wherein X is a hydrophobic aliphatic hydrocarbon chain containing 19 carbon atoms and having 4 nonconjugated cis double bonds in the middle portion of the chain and Y is an amide radical.

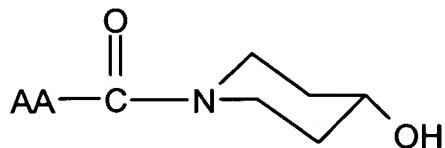
22. (previously added) The formulation of claim 12 wherein X is a hydrophobic aliphatic hydrocarbon chain containing 19 carbon atoms and having 4 nonconjugated cis double bonds in the middle portion of the chain; Y is an amide radical; and Z is a hydroxy substituted aryl radical.

RESPONSE TO ELECTION REQUIREMENT

The March 31, 2003 Office Communication stated the present application contained patentably distinct species of the claimed invention and imposed an election of species under 35 USC §121 to a single disclosed chemical compound for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicants respectfully traverse the above election requirement on the grounds that the generic claims include sufficiently few species that a search and examination of all of the species at one time would not be an undue burden.

In order to strictly comply with this election requirement Applicants provisionally elect, with traverse, the below chemical compound.



This compound is supported by the specification.

Under this provisional election claim 1 and at least claims 2 and 5-6, although broader than the elected species, also read on the elected species.

Claim 10, while directed to another aspect of the invention, is also generic and claim 11, although broader than the elected species, also reads on the elected species.

Claim 12, while directed to another aspect of the invention, is also generic and at least claims 13 and 16-17, although broader than the elected species, also read on the elected species.